

Amendment Dated: May 8, 2006
Serial No.: 10/800,902

IN THE CLAIMS:

Please amend claim 1, and cancel claim 3. The status of all claims is as follows:

1. (Currently Amended) A suspension mechanism for a fan motor of a combustion chamber in a combustion-powered tool for driving a fastener into a workpiece, the fan motor disposed within a cylinder head, the cylinder head defining a cavity including a floor, the fan motor being disposed within the cavity such that, in a rest position, a lower end of a sidewall of the motor is disposed above and spaced from the floor, such that the cylinder head substantially encloses the fan motor, the tool generating an acceleration of the fan motor in an axial direction away from the workpiece upon a combustion in the chamber and a subsequent reciprocal axial acceleration of the fan motor, at least one of the accelerations causing the fan motor to oscillate relative to the tool, comprising:

an elastic member disposed within the tool and relative to the motor to directly receive and absorb force along the axial direction to counteract and dampen the acceleration in the axial direction of the motor relative to the floor; and

a restraining member mounted to the cylinder head of the tool and disposed relative to said elastic member to secure said elastic member relative to the cylinder head,

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thereby resisting upward bias of said elastic member in response to the acceleration of the fan motor;

wherein said elastic member is disposed directly between the fan motor and the cylinder head;

wherein said elastic member is in direct contact with the motor.

2. (Cancelled)

3. (Cancelled)

4. (Previously Presented) The suspension mechanism of claim 1 wherein at least a portion of said restraining member is disposed radially outwardly of the fan motor.

5. (Original) The suspension mechanism of claim 1 wherein said elastic member comprises an integral piece.

6. (Original) The suspension mechanism of claim 5 wherein said elastic member comprises an elastomer.

7. (Original) The suspension mechanism of claim 1 wherein said restraining member comprises a metal clip.

8. (Original) The suspension mechanism of claim 7 wherein said restraining member has an arcuate shape.

9. (Previously Presented) A combustion-powered tool for driving a fastener into a workpiece, the tool comprising:

a combustion chamber defined at least in part by a cylinder head;

a combustion chamber fan having a motor connected thereto, the motor being disposed within the cylinder head such that the cylinder head substantially encloses the motor and such that a sidewall of the motor is entirely external of said combustion chamber, the tool being configured to generate an acceleration of the motor in an axial direction away from the workpiece upon a combustion in said combustion chamber and a subsequent reciprocal axial acceleration of the motor, the axial acceleration of the motor being relative to a separation point on the cylinder head between the motor sidewall and said combustion chamber, at least one of the accelerations causing the motor to oscillate;

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an elastic member disposed within a space defined by the cylinder head and relative to the motor to directly receive and absorb force along the axial direction to counteract and dampen the axial acceleration; and

a restraining member mounted to the cylinder head and disposed relative to said elastic member to secure said elastic member relative to the cylinder head, thereby resisting upward bias of said elastic member in response to the acceleration of the motor;

wherein said elastic member is in direct contact with the motor.

10. (Original) The combustion-powered tool of claim 9 wherein said elastic member comprises an integral piece.

11. (Cancelled)

12. (Original) The combustion-powered tool of claim 10 wherein said elastic member comprises an elastomer.

13. (Original) The combustion-powered tool of claim 9 wherein at least a portion of said restraining member is disposed radially outwardly of the motor.

14. (Original) The combustion-powered tool of claim 9 wherein said restraining member comprises a metal clip.

15. (Original) The combustion-powered tool of claim 14 wherein said restraining member has an arcuate shape.

16. (Withdrawn) The suspension mechanism of claim 1 wherein said restraining member comprises a C-clip.

17. (Previously Presented) A suspension mechanism for a fan motor of a combustion chamber in a combustion-powered tool for driving a fastener into a workpiece, the fan motor disposed within a cylinder head, the tool generating an acceleration of the fan motor in an axial direction away from the workpiece upon a combustion in the chamber and a subsequent reciprocal axial acceleration of the fan motor, at least one of the accelerations causing the fan motor to oscillate relative to the tool, comprising:

an elastic member disposed within the tool and relative to the motor to directly receive and absorb force along the axial direction to counteract and dampen the acceleration in the axial direction away from the workpiece; and

a restraining member mounted to the cylinder head of the tool and disposed relative to said elastic member to secure said elastic member relative to the cylinder head, thereby resisting upward bias of said elastic member in response to the acceleration of the fan motor in the axial direction away from the workpiece;

wherein the acceleration of the fan motor in the axial direction away from the workpiece is constrained solely via said elastic member;

wherein said elastic member is in direct contact with the motor.

18. (Cancelled)

19. (Previously Presented) A suspension mechanism for a fan motor of a combustion chamber in a combustion-powered tool for driving a fastener into a workpiece, the fan motor disposed within a cylinder head, the cylinder head defining a cavity including a floor, the fan motor being disposed within the cavity such that, in a rest position, a lower end of a sidewall of the motor is disposed above and spaced from the floor, the tool generating an acceleration of the fan motor in an upward axial direction away from the workpiece upon a combustion in the chamber and a subsequent reciprocal downward axial acceleration of the fan motor, at least one of the accelerations causing the fan motor to oscillate relative to the tool, comprising:

an elastic member disposed within the tool and relative to the motor to directly receive and absorb force along the upward axial direction to counteract and dampen the acceleration in the upward axial direction of the motor relative to the floor; and

a restraining member mounted to the cylinder head of the tool and disposed relative to said elastic member to secure said elastic member relative to the cylinder head, thereby resisting upward bias of said elastic member in response to the acceleration of the fan motor in the upward axial direction;

wherein said elastic member is in direct contact with the motor;

wherein the acceleration of the motor in the upward axial direction is constrained solely via said elastic member.

20. (Previously Presented) A suspension mechanism for a fan motor of a combustion chamber in a combustion-powered tool for driving a fastener into a workpiece, the fan motor disposed within a cylinder head, the cylinder head defining a cavity including a floor, the fan motor being disposed within the cavity such that, in a rest position, a lower end of a sidewall of the fan motor is disposed above and spaced from the floor and such that the sidewall of the fan motor is entirely external of the combustion chamber, the tool generating an upward axial acceleration of the fan motor in an axial direction away from the workpiece upon a combustion in the chamber and a subsequent reciprocal lower axial acceleration of the

fan motor, at least one of the accelerations causing the fan motor to oscillate relative to the floor, comprising:

an elastic member disposed within the tool at least partially within the cavity and relative to the motor to directly receive and absorb force along the axial direction to counteract and dampen the upward axial acceleration of the fan motor relative to the floor; and

a restraining member mounted to the cylinder head of the tool and disposed relative to said elastic member to secure said elastic member relative to the cylinder head, thereby resisting upward bias of said elastic member in response to the upward axial acceleration of the fan motor;

wherein said restraining member comprises a metal clip.

21. (Previously Presented) The suspension mechanism of claim 20 wherein said restraining member has an arcuate shape.

22. (Withdrawn) A suspension mechanism for a fan motor of a combustion chamber in a combustion-powered tool for driving a fastener into a workpiece, the fan motor disposed within a cylinder head, the tool generating an acceleration of the fan motor in an axial direction away from the workpiece upon a combustion in the chamber and a subsequent

reciprocal axial acceleration of the fan motor, at least one of the accelerations causing the fan motor to oscillate relative to the tool, comprising:

an elastic member disposed within the tool and relative to the motor to directly receive and absorb force along the axial direction to counteract and dampen the acceleration; and

a restraining member mounted to the cylinder head of the tool and disposed relative to said elastic member to secure said elastic member relative to the cylinder head, thereby resisting upward bias of said elastic member in response to the acceleration of the fan motor;

wherein the cylinder head includes a portion disposed above the restraining member such that the cylinder head acts to at least partially restrain said restraining member.

23. (Withdrawn) The suspension mechanism of claim 1 wherein the suspension mechanism regulates movement of the motor within the cylinder head.

24. (Withdrawn) A suspension mechanism for a fan motor of a combustion chamber in a combustion-powered tool for driving a fastener into a workpiece, the fan motor disposed within a cylinder head, the tool generating an acceleration of the fan motor in an axial direction away from the workpiece upon a combustion in the chamber and a subsequent

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reciprocal axial acceleration of the fan motor, at least one of the accelerations causing the fan motor to oscillate relative to the tool, comprising:

an elastic member disposed within the tool and relative to the motor to directly receive and absorb force along the axial direction to counteract and dampen the acceleration; and

a restraining member mounted to the cylinder head of the tool and disposed relative to said elastic member to secure said elastic member relative to the cylinder head, thereby resisting upward bias of said elastic member in response to the acceleration of the fan motor;

wherein the motor is restrained against upward movement solely by engagement via said elastic member.